Amendments to the Claims:

The listing of claims will replace all prior versions, and listings, of claims in the application:

Listing of Claims:

1. (Currently amended) A process for the production of a purified refolded biologically active monomeric bone morphogenetic factor, which process comprises subjecting an inclusion body of a bone morphogenetic factor having an ~~of which~~ amino acid sequence ~~is~~, which has been modified to not form an intermolecular disulfide bond with another bone morphogenetic factor monomer, to the following steps a) - c) in order, thereby producing the refolded monomeric bone morphogenetic factor;
   a) expressing said bone morphogenetic factor in the form of an inclusion body using a bacterium containing a polynucleotide encoding said bone morphogenetic factor, recovering said inclusion body and treating the recovered inclusion body with a denaturing agent to obtain a solubilized monomer,
   b) treating the solubilized monomer directly with a refolding solution to obtain a refolded monomeric bone morphogenetic factor,
   c) subjecting the refolded monomeric bone morphogenetic factor to purification.

2. (Previously presented) The process for the production according to claim 1, wherein said bacterium is *Escherichia coli*.

3. (Original) The process of claim 1, wherein the refolding solution has a final concentration of the denaturing agent between 1 M and 4 M.

4. (Original) The process for the production according to claim 1, wherein said refolding solution comprises cysteine or salt thereof, bone morphogenetic factor at a final concentration above 1.0 *mg/mL*, sodium chloride at a final concentration of 0.1 to 1.5 M, and cholic acid or its derivatives at a final concentration of 5 to 100 mM and has a pH in the range of 8 - 10.

5. (Previously presented) The process for the production according to claim 4, wherein said refolding solution further comprises a compound having a guanidino group or the salt thereof.

6. (Original) The process for the production according to claim 1, wherein said bone morphogenetic factor is a bone morphogenetic factor selected from the group consisting of MP52, BMP-2, BMP-4, BMP-6, BMP-7, BMP-12 and BMP.

7. (Previously presented) The process of claim 1 wherein the refolded monomeric bone morphogenetic factor is purified by ultrafiltration, isoelectric precipitation and reverse phase chromatography.

8. (Previously presented) The process of claim 1 wherein the recovered inclusion body is washed with a detergent or denaturing agent prior to treating the recovered inclusion body to obtain a solubilized monomer.

9-11. (Canceled)

12. (Withdrawn) A method for inducing multifunctional growth factor activity in a warm-blooded animal comprising administering to a warm-blooded animal in

need thereof a sufficient amount of the refolded monomeric bone morphogenetic factor produced by the process of claim 1 to induce said activity.

13. (Withdrawn) A method for inducing multifunctional growth factor activity in a warm-blooded animal comprising administering to a warm-blooded animal in need thereof a sufficient amount of the refolded dimeric bone morphogenetic factor produced by the process of claim 11 to induce said activity.

14. (Withdrawn) A method according to claim 12, wherein said multifunctional growth factor activity is useful for applications in promoting angiogenesis, for treating neuronal diseases, in periodontal and dental applications, for treating connective tissue such as tendon and ligament, and skin-related disorders such as wound healing or hair growth disorders as well as for inducing cartilage and bone morphogenesis.

15. (Withdrawn) A method according to claim 13, wherein said multifunctional growth factor activity is useful for applications in promoting angiogenesis, for treating neuronal diseases, in periodontal and dental applications, for treating connective tissue such as tendon and ligament, and skin-related disorders such as wound healing of hair growth disorders as well as for inducing cartilage and bone morphogenesis.

16. (Currently amended) The process for the production according to claim 1, wherein said bone morphogenetic factor having an ~~of which~~ amino acid sequence ~~is~~ which has been modified to not form an intermolecular disulfide bond with another bone morphogenetic factor monomer is a modified MP52.

17. (Previously presented) The process for the production according to claim 16, wherein said modified MP52 is a polypeptide as set forth in SEQ ID NO:1, wherein X in SEQ ID NO:1 is not cysteine.

18. (Previously presented) A process of obtaining a solution containing a biologically active monomeric bone morphogenetic factor, wherein said solution is free from a dimeric bone morphogenetic factor formed by an intermolecular disulfide bond between two monomeric bone morphogenetic factors,

said process comprising the steps of

expressing a bone morphogenetic factor, of which cysteine residue forming an intermolecular disulfide bond with another bone morphogenetic factor is substituted with another amino acid residue, in an inclusion body using a bacterium containing a polynucleotide encoding said bone morphogenetic factor;

recovering said inclusion body;

solubilizing the recovered inclusion body in a solution containing a denaturing agent, thereby obtaining a solubilized monomeric bone morphogenetic factor;

refolding said solubilized monomeric bone morphogenetic factor in a refolding solution, thereby obtaining a solution of a biologically active monomeric bone morphogenetic factor, wherein said solution is free from a dimeric bone morphogenetic factor formed by an intermolecular disulfide bond between two monomeric bone morphogenetic factors.

19. (New) The process of claim 18, wherein said bone morphogenetic factor is a modified MP52.

20. (New) The process of claim 19, wherein said modified MP52 is a polypeptide as set forth in SEQ ID NO:1, wherein X in SEQ ID NO:1 is not cysteine.